



PrepAnywhere

Using A.I. to teach
advanced math



 **PrepBox**

Investor Presentation

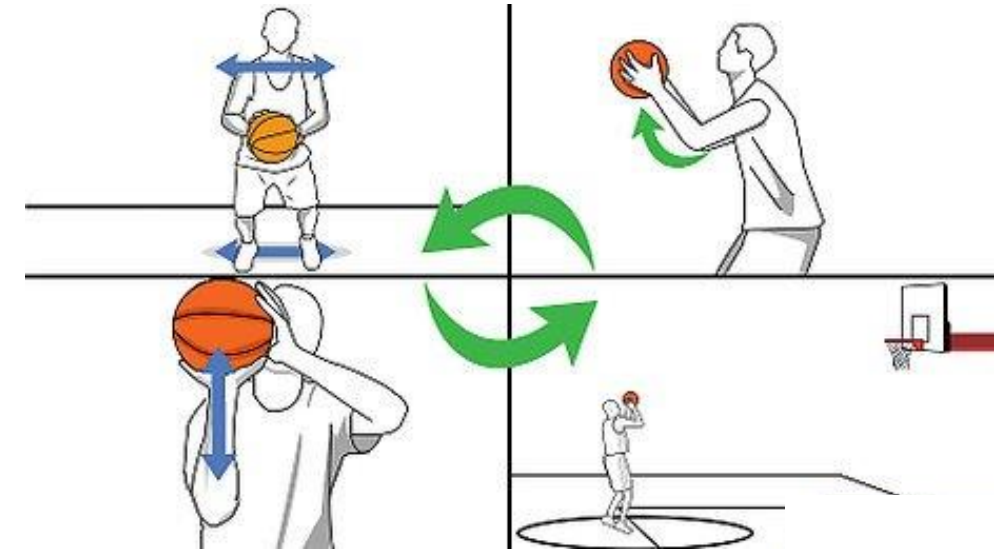
We're not teaching math right

When it comes to math, we are obsessed with getting the answer right vs. learning

This is how we would teach basketball if it was math



...when this is what we need



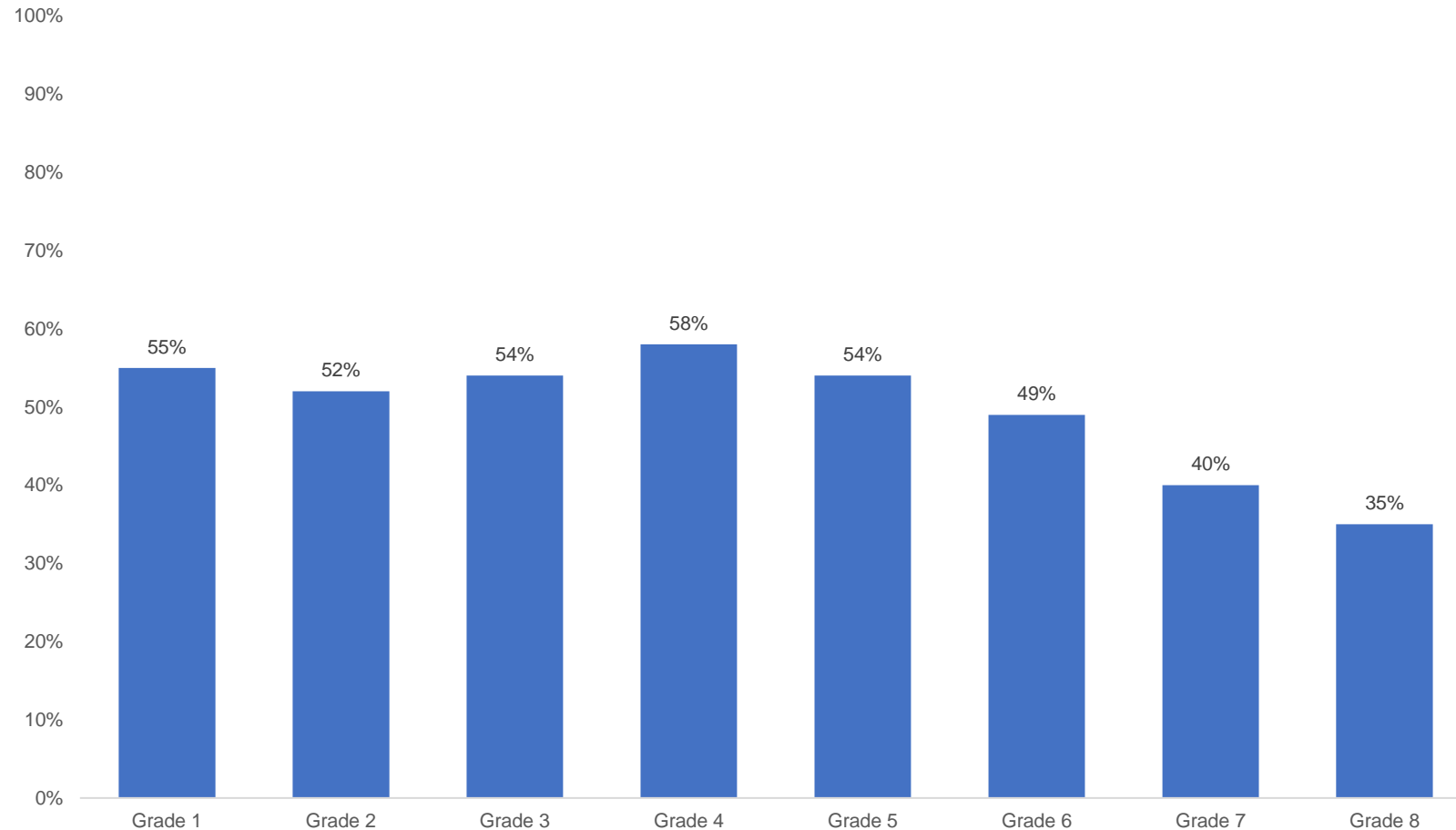
"Keep practicing. Never let someone tell you you're too small or too slow"

– Chris Paul

The horrific result

Entire generations are behind and suffer from math anxiety

% of American Students on Grade Level in Math



93% of Americans indicate that they experience some level of math anxiety

Add to this:

- **Public schools are underfunded**
- **Tutors are unaffordable**

And the crisis is likely to continue

Our solution: PrepBox, learn by doing

We have developed and launched the only interactive iPad platform that breaks down the learning journey for advanced math into short 10-20m iterations of lectures and questions or what we call *learning by doing*

The Learning

- ✓ 100k+ proprietary lecture videos from algebra to calculus
- ✓ Platform that enables tutoring with 1-on-1 feel
- ✓ Solution videos with A.I.-generated similar questions

Illustrate the factoring of each trinomial using algebra tiles or a diagram.

$$x^2 + 8x + 9 = (x+3)(x+3)$$

Which ordered pair is the solution of the following system of equations?

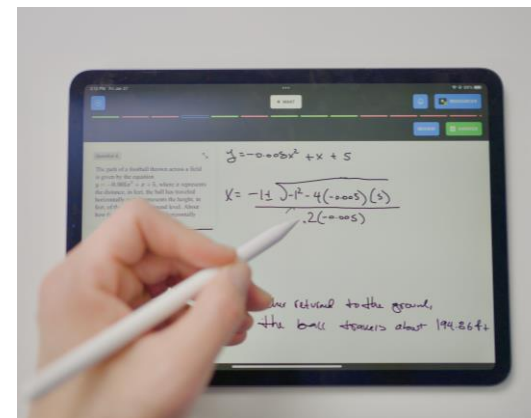
$$\begin{aligned} 3x - 5y &= 11 \\ 3x - 8y &= 5 \end{aligned}$$

A (2,1) C (7,2) B (7,-2) D (3,-2)

The Doing

- ✓ White-board to solve problems
- ✓ Submissions **must** show proof of work
- ✓ Every ~10m lecture is followed immediately by questions

[Watch our demo](#)



Use the unit circle to find exact values of the three primary trigonometric ratios for 210° and 240° .

a) $210^\circ = 30^\circ$ reference angle

b) $240^\circ - 180^\circ = 60^\circ$

Points for 210° : $(-\frac{1}{2}, -\frac{\sqrt{3}}{2})$

Points for 240° : $(-\frac{1}{2}, -\frac{\sqrt{3}}{2})$

$\sin 210^\circ = -\frac{\sqrt{3}}{2}$

$\cos 210^\circ = -\frac{1}{2}$

$\tan 210^\circ = \frac{\sqrt{3}}{1} = \sqrt{3}$

$\sin 240^\circ = -\frac{\sqrt{3}}{2}$

$\cos 240^\circ = -\frac{1}{2}$

$\tan 240^\circ = \frac{\sqrt{3}}{1} = \sqrt{3}$

The product: the student's perspective

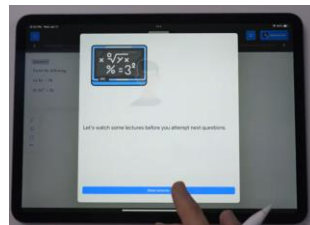
Our app breaks down lessons into smaller concepts and enables students to move at their own pace, dramatically improving engagement while we collect the necessary data to build out our Tutor A.I.

Student journey if not stuck

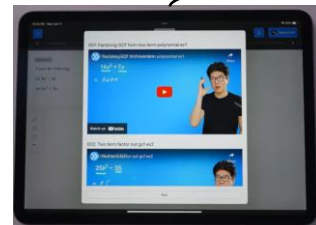
This cycle repeats in 20-30m intervals



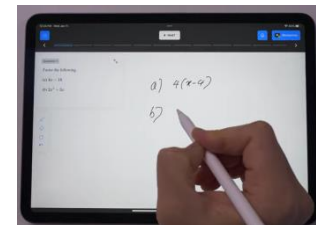
Login



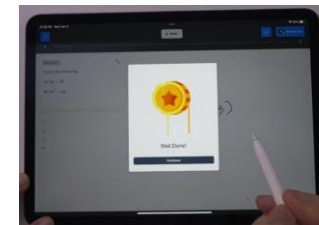
Begin session



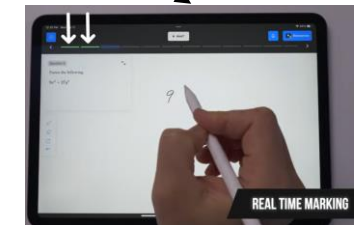
Watch lectures (10-15m)



Solve questions (10-15m)



Submit solutions

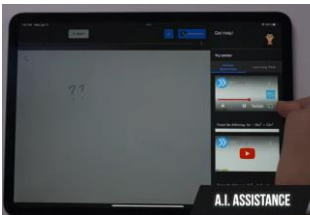


Get them marked

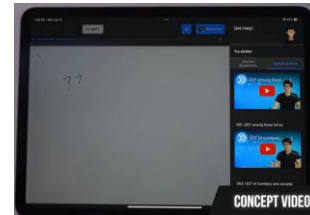
Student journey if stuck and A.I. is sufficient



Stuck?



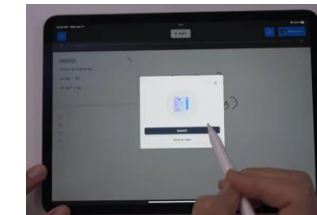
Watch similar q. solutions



Watch relevant lectures

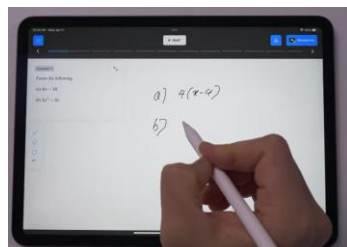


Watch hint videos

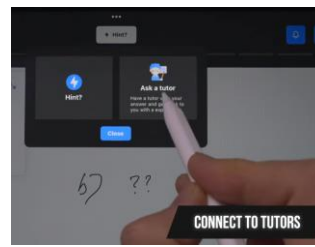


Submit for marking

Student journey if stuck and tutor is required



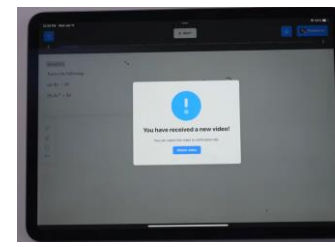
Stuck?



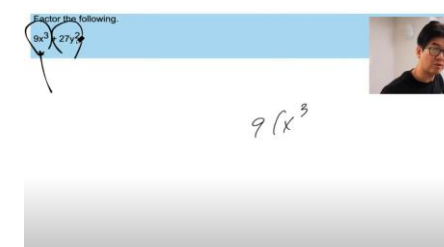
Ask tutor's help



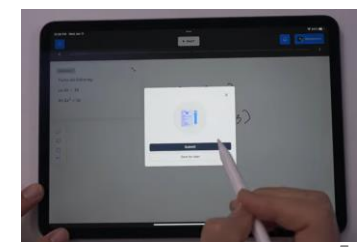
Tutor sees the request



Tutor sends video



Watch video



Submit for marking

The product: the tutor's perspective

On our platform, the best tutors are able to teach 10x their maximum capacity, as A.I. recommendation engine and coursework design allow them to focus 100% on providing guidance to students who are stuck

The screenshot shows a tutor's interface with a sidebar on the left listing students: Jason Baik, Elia Abnous, Sunwoo Kim, and Sarah Chung. The main area displays a grid of question cards numbered 1 through 14. Card 4 is highlighted in red, indicating a student request for help. A modal window titled 'Question 3' is open, showing a table of simple interest GIC data and three questions. Below the table, a student's handwritten work is visible on a whiteboard, including calculations for the first differences, principal, and annual rate. The interface also features a search bar at the top and a bottom status bar with multiple-choice options for the question.

Student requesting help flashes red

Clicking on the question opens up the student whiteboard

Real-time view of the student whiteboard enables quality feedback

Time (years)	Amount (\$)
1	689
2	728
3	767
4	806
5	845

(a) Calculate the first differences. What do these values represent?
(b) What is the principal of this investment? How do you know?
(c) What is the annual rate of simple interest?

Handwritten work on whiteboard:

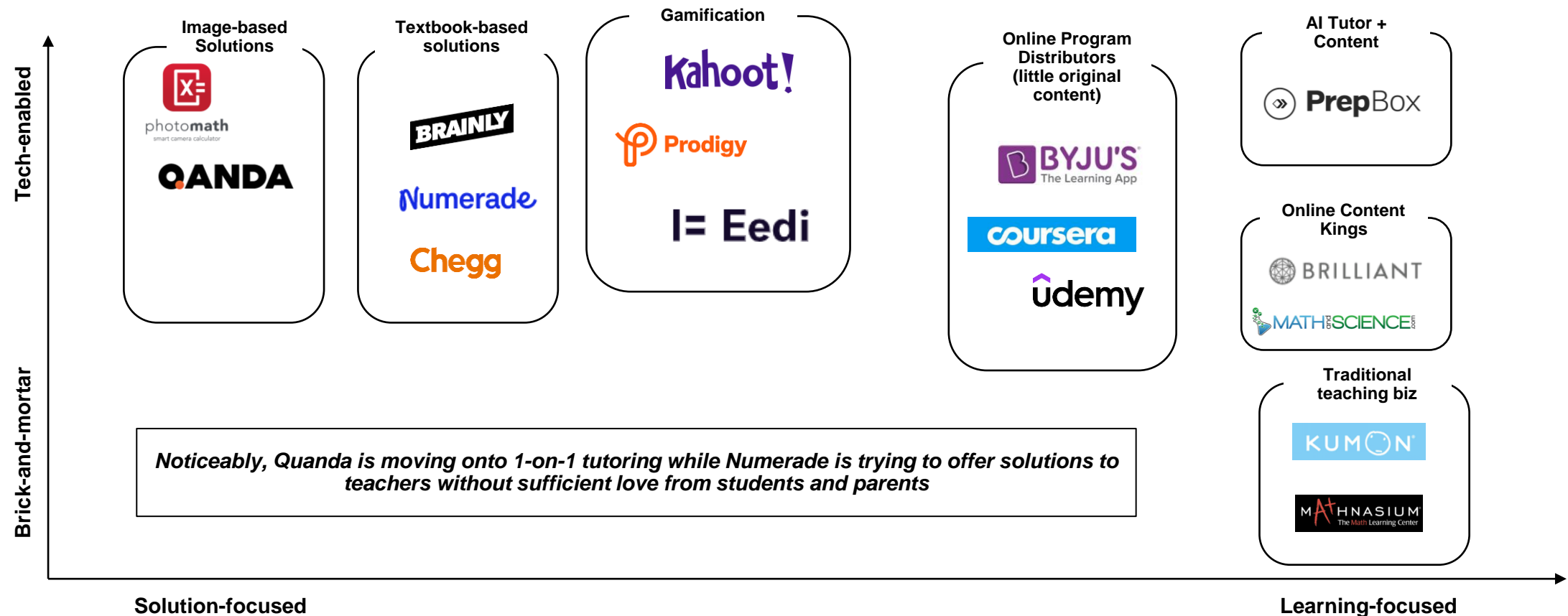
a. $728 - 689 = 39$, $767 - 728 = 39$, $806 - 767 = 39$
b. $689 - 39 = 650$
c. $\frac{39}{650} \times 100 = 6\%$

Multiple choice options: a) 39, b) \$650, c) 6%

To be refined after improvements

Why are we going to win in the market?



















































We are the only company that is providing a holistic solution to math learning that is AI-enabled -we know from experience that effective teaching requires more than quality content and slick tech



Why are we different?

Much of B2C edtech development has focused on getting *answers* to students vs. developing a scalable holistic learning platform enabled by A.I.

We are the first and only B2C math edtech company where education outcome drives our product development

		Numerade	Chegg	 photomath	I= Eedi	QANDA	 PrepBox
		2018	2005	2014	2015	2015	2017
The learning	Founded						
	Tried-and-tested lectures						
	Guidance from an experienced tutor						
The doing	Problems with hints & solutions						
	Whiteboard for problem-solving				 (All multiple choice)		
	Personalized Coursework				 (determined by tutor)		
	Scalable Tutoring Platform (1-on-20)						
	Solely math-focused						
	Data capture for A.I. Tutor Development						

State of our A.I.

We have already integrated A.I. into our product, and are ultimately looking to create a math tutor A.I. that is indistinguishable from the best tutors using longitudinal student data we're collecting on PrepBox

	Description	Type	Dataset	Status
Content & curriculum recommendation	A.I. recommends similar questions and related videos to aid the student's journey, and generates "Mastery" for questions students got wrong to enable review	Supervised learning	Videos and question recommendations and their quality rated by Min and other tutors	Implemented
A.I. Grading	Image recognition to translate student submission into LaTeX to grade	Supervised learning	Currently reliant on Mathpix but can develop in-house	Implemented
A.I. Tutor	Based on the test and admission outcomes of thousands of students, the A.I. makes recommendations on what areas to improve, nudge students with text, and what boosts performance, effectively becoming a tutor	Unsupervised learning	Thousands of PrepBox student data on their speed, accuracy, and their interactions on PrepBox matched against their academic performance	Under development

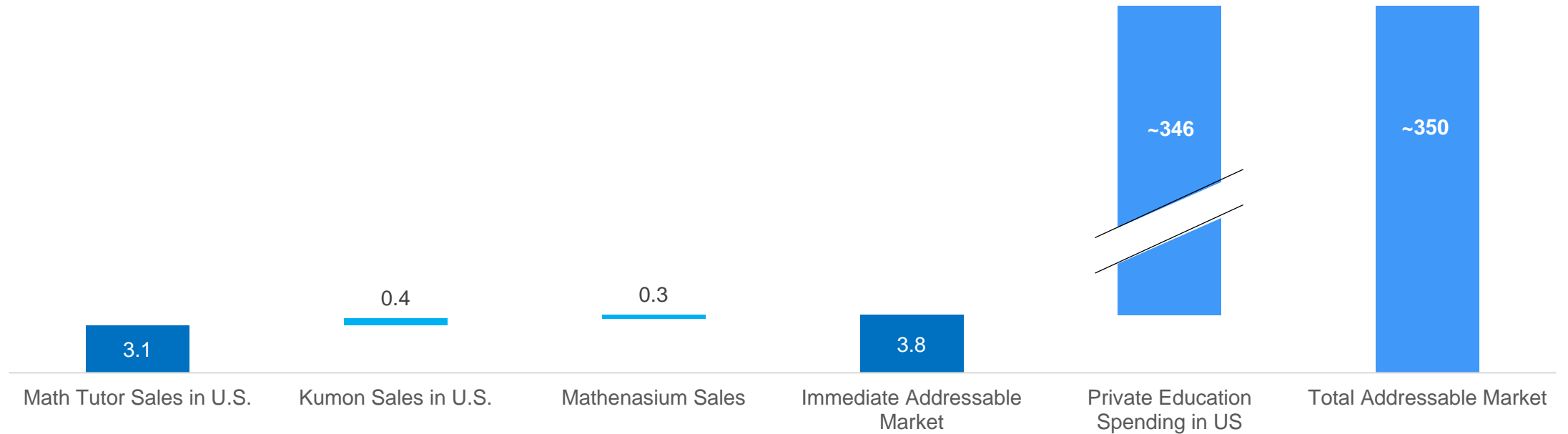
Our "holy grail"

Addressable Market

Immediate addressable market of ~\$4bn and a larger addressable market >\$350bn just in the U.S. alone

Estimated math-tutor spending in the United States (2019)

(US\$bn)



Our Master Plan

You are joining us at the most exciting juncture in our long journey to solve the world's math learning loss with A.I.

